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This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

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Product no AS08 330S

PetC | Rieske iron-sulfur protein of Cyt b6/f complex, protein standard

Product information

Format	Lyophilized
Quantity	250 µl
Reconstitution	For reconstitution add 225 µl of milliQ water, Please notice that this product contains 10% glycerol and might appear as liquid but is provided lyophilized
Storage	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.
Additional information	The PetC protein standard can be used in combination with global anti-PetC antibodies to quantitate PetC from a wide range of species. Global antibodies are raised against highly conserved amino acid sequences in the PetC protein. Quantitative western blot: detailed method description, video tutorial

Application information

Recommended dilution	Standard curve: 3 loads are recommended (0.5, 2 and 4µl). For most applications a sample load of 0.2µg of chlorophyll will give a PsbA signal in this range. Positive control:a 2µl load per well is optimal for most chemiluminescent detection systems. This standard **is stabilized and ready** and does not require heating before loading on the gel. Please note that this product contains 10% glycerol and might appear as liquid but is provided lyophilized. Allow the product several minutes to solubilize after adding water. Mix thoroughly but gently Take extra care to mix thoroughly before each use, as the proteins tend to settle with the more dense layer after freezing.
Expected | apparent MW	33 kDa (larger than native protein due to the addition of His-tag), In most gel systems, PetC protein migrates at 23 kDa
Additional information	**Concentration:** after adding 225 µl of milliQ water final concentration of the standard is 0.15 pmol/µl **Protein standard buffer composition**: Glycerol 10%, Tris Base 141 mM, Tris HCl 106 mM, LDS 2%, EDTA 0.51 mM, SERVA® Blue G250 0.22 mM, Phenol Red 0.175 mM, pH 8.5, 0.1mg/ml PefaBloc protease inhibitor (Roche), 50mM DTT. **This standard is ready-to-load and does not require any additions or heating. It needs to be fully thawed and thoroughly mixed prior to using. Avoid vigorous vortexing, as buffers contain detergent. Following mixing, briefly pulse in a microcentrifuge to collect material from cap.** **This standard is stabilized and ready and does not require heating before loading on the gel.** **Please note that this product contains 10% glycerol and might appear as liquid but is provided lyophilized. Allow the product several minutes to solubilize after adding water. Mix thoroughly but gently Take extra care to mix thoroughly before each use, as the proteins tend to settle with the more dense layer after freezing.**
Selected references	Pipitone et al. (2021). A multifaceted analysis reveals two distinct phases of chloroplast biogenesis during de-etiolation in Arabidopsis. Elife. 2021 Feb 25;10:e62709. doi: 10.7554/eLife.62709. PMID: 33629953; PMCID: PMC7906606. Li et al. (2014). The nitrogen costs of photosynthesis in a diatom under current and future pCO2. New Phytol. 2014 Sep 25. doi: 10.1111/nph.13037. Wu et al. (2014). Large centric diatoms allocate more cellular nitrogen to photosynthesis to counter slower RUBISCO turnover rates. Front. Mar. Sci., 09 December 2014 | doi: 10.3389/fmars.2014.00068.